

PROCEEDINGS  
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## DESCRIPTION OF A NEW VOLE FROM OREGON.

BY GERRIT S. MILLER, JR.

A small species of *Microtus* of the *nanus* group, represented by twelve specimens from the Willamette Valley, Oregon,\* may be named and described as follows :

***Microtus canicaudus* sp. nov.**

*Type* from McCoy, Oregon. Adult ♂, No. 75841, U. S. National Museum, Biological Survey collection. Collected December 1, 1895, by B. J. Bretherton. Original No. 2119.

*General characters.*—Size and proportions about as in *Microtus nanus* (Merriam), but color yellower and less grizzled, and tail usually nearly uniform grayish above and below; skull broader than in *M. nanus*, with rounder audital bullæ and differently shaped bony palate.

*Color.*—Head, back, and sides umber-brown thickly sprinkled with blackish hairs, the ground color darker on head and paler on sides, where it shades rather abruptly into color of belly; ventral surface grayish white, faintly marked with yellowish; fur everywhere deep plumbeous at base, this color showing through irregularly on belly and throat; tail whitish gray, slightly paler below and darker at tip.

The exact shade of brown varies, but it is always yellower than in *M. nanus*, and seldom shows any approach to the peculiar grizzled appearance characteristic of the latter. The tail occasionally has a tolerably well-defined dark dorsal stripe, but in the great majority of specimens (taken in March, April, October, November, and December) it is scarcely visible.

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\*Two from Beaverton (Nos. 371 and 372, Miller collection), and ten from McCoy (Nos. 75834-75842 and 75844, U. S. National Museum, Biological Survey collection), the latter kindly placed at my disposal by Dr. C. Hart Merriam.

*Skull.*—Fully grown skulls vary from 22.6 to 24.6 mm. in basilar length and from 14.6 to 15.6 in zygomatic breadth; brain case broader and deeper than in *M. nanus*; audital bullæ flatter and rounder; bony palate with excessively shallow lateral pits.

*Teeth.*—The enamel pattern, like that of the other members of the *nanus* group, is that of the typical or tetramerodont species of the subgenus *Microtus*.

*Measurements.*—Type specimen: total length, 135; tail vertebræ, 33; hind foot, 20. Average of eight adult topotypes: total length, 141; tail vertebræ, 35.7; hind foot, 20. (All measurements from fresh specimens by collector.)

*General remarks.*—*Microtus nanus*, *M. canicaudus*, and *M. mogollonensis* form a group of closely related species which in size, general appearance, and cranial and dental characters differ noticeably from other American members of the genus, but strikingly resemble the European *Microtus arvalis*. So close is this resemblance that it is possible to select skulls of *M. mogollonensis* (the smallest member of the group) from San Francisco Mountain, Arizona, that are practically indistinguishable from skulls of *M. arvalis* taken in Slavonia. The only constant cranial characters to distinguish the skulls of these two species appear to be the slightly broader rostrum, more flaring zygomata, and wider, less squarely truncate interpterygoid fossa of *mogollonensis*. Externally the resemblance is no less close, for *M. arvalis* has the same short tail and small hind foot as the American species, while in color it differs only in a somewhat yellower cast.

The three American species are distinguished from each other by the following characters:

*M. mogollonensis* (Mearns).—Total length, 132.2; tail vertebræ, 28.3; hind foot, 18 (average of eight adults); general color grizzled yellowish brown; tail indistinctly bicolor; basilar length of skull about 21 millimeters; nasal branches of premaxillaries considerably extended back of nasals; audital bullæ roundish; bony palate with lateral pits very deep.

*M. nanus* (Merriam).—Total length, 140; tail vertebræ, 37.7; hind foot, 18.9 (average of nine adults); general color grizzled grayish brown; tail distinctly bicolor; basilar length of skull about 23 millimeters; nasal branches of premaxillaries slightly extended back of nasals; audital bullæ subfusiform; palate with lateral pits moderate.

*M. canicaudus* Miller.—Total length, 141; tail vertebræ, 35.7; hind foot, 20 (average of eight adults); general color uniform umber-brown; tail indistinctly bicolor; basilar length of skull about 23 millimeters; nasal branches of premaxillaries scarcely extended back of nasals; audital bullæ roundish; palate with lateral pits very shallow.